#### V. CENTER OPERATIONS: ACADEMIC EDUCATION

The academic education program offered at Job Corps centers is designed to complement the vocational training program and to provide young men and women with the academic skills necessary for success in their chosen occupations. The basic program offers both reading and mathematics education. In addition, it seeks to move students toward receiving a GED certificate or a high school diploma. The program also includes a number of other courses that are intended to help students develop the skills and knowledge they need to become and remain employed and to function as productive citizens.

This chapter describes the academic education component of center operations at the time of the site visits. The results draw on information collected during the visits, from discussions with teachers and students, from classroom observations, and from SPAMIS and the center mail survey.

We begin with an overview of the philosophy and objectives of the academic program and continue with background on the academic abilities of students entering Job Corps. Next, we describe the core academic education offerings and follow with a discussion of the processes used to assess students' academic abilities and assign them to classes. We then describe the facilities and resources available to support the Job Corps academic programs. The chapter concludes with a discussion of the coordination between the academic and vocational training components in Job Corps.

### A. PHILOSOPHY AND OBJECTIVES OF ACADEMIC PROGRAM

The Job Corps academic program is designed to provide students with the skills they need to function effectively in the workplace or enroll in higher education programs. Providing students with strong skills in reading and math is the core of the program, and all entering students who need

help in these areas are enrolled in remedial classes. In addition, the academic education program seeks to help students obtain a GED or a high school diploma, and in some locations postsecondary education opportunities are also available.

The core academic program at each Job Corps center includes the following:

- Reading competencies program, including basic reading and graded reading
- Math competencies program
- Writing/thinking skills program
- GED competencies program

In addition to these core offerings, a number of other classes are intended to help students develop vital skills and knowledge, including World of Work (WOW), cultural awareness and intergroup relations (IGR), parenting, driver education, and health education. Centers that enroll non-English speakers also offer English as a Second Language (ESL).

Together, these courses prepare students to develop constructive employability skills and work attitudes (WOW), provide them with an important tool to increase their employability (driver education), and instruct them in areas that will enhance their physical well-being (health education/alcohol and other drugs) and ability to function as responsible adults in society (parenting and cultural awareness/IGR). All these courses are mandatory, although driver education is required only for students in trades in which the possession of a driver's license is essential. Other students are offered driver education (classroom and on-the-road instruction) at the center's discretion and as resources permit.

The Job Corps basic education program is designed to be flexible and to meet the needs of students with a wide range of knowledge and skills, from nonreaders to students performing at high

school equivalency levels. The Job Corps academic education program is self-paced and operates on an open-entry, open-exit basis, so that new students can enroll at any point and progress at their own pace. Each student has individualized goals, objectives, and proficiencies. Job Corps' basic education classes have lower student/teacher ratios (roughly 15 to 1) than traditional public schools to permit this individualized approach to learning.

In offering an academic education program that meets these broad objectives, centers must follow certain policies and procedures established by the Job Corps National Office. Specifically, all centers must use the guides and materials developed for each course. The course guides detail the required student competencies to be attained and the procedures to attain them, as well as the required instructional materials, tests, and record keeping. The use of appropriate supplementary materials is also encouraged to strengthen the program. Before providing details about the academic program, we provide additional background information on the academic abilities of students at entry.

### B. ACADEMIC ABILITIES OF STUDENTS AT ENTRY

Job Corps serves an educationally disadvantaged population, with approximately 8 out of 10 students lacking a GED or high school diploma at the time of entry. Such students typically enter Job Corps with substantial academic deficiencies. Even many of the students with a GED or high school diploma need extensive academic remediation to meet the requirements of their trades.

Information on the academic education abilities of Job Corps students at entry is provided in Table V.1. These data are for all students who terminated in 1996, roughly when most students who enrolled in the National Job Corps Study would have left the program. Twenty-two percent of all terminees in 1996 had a GED or high school diploma at entry. Contract centers serve a substantially higher proportion of GED or high school diploma recipients (23 percent, compared to 17 percent for

TABLE V.1

ACADEMIC CHARACTERISTICS AT PROGRAM ENTRY OF JOB CORPS 1996 TERMINEES

	Overall	CCC	Contract Centers	Primarily Residential	Significantly Nonresidential
GED/HSD at Entry (Percentage)	22	17	23	21	25
Highest Grade Completed at Entry	10.0	9.8	10.1	10.0	10.2
Initial TABE Reading Grade	7.6	8.0	7.5	7.7	7.4
TABE Reading Level Less than 8.5 <sup>a</sup> (Percentage)	59	53	60	8	61
Initial TABE Math Grade	7.1	7.2	7.0	7.1	7.0
TABE Math Level Less than 8.5 (Percentage)	74	70	74	73	75

SOURCE: SPAMIS data for 1996 terminees from Job Corps.

<sup>&</sup>lt;sup>a</sup> Students with initial TABE scores below 8.5 are assigned to graded reading and math. Students who score 8.5 or above are assigned to GED preparation.

CCCs). Moreover, the table indicates that centers with significant proportions of nonresidents tend to serve more students having a GED or high school diploma upon entry compared to centers that are primarily residential.<sup>1</sup>

Table V.1 also provides information on the number of years of schooling completed and initial reading and math grade levels based on scores from the Tests of Adult Basic Education (TABE).<sup>2</sup> On average, Job Corps students have completed the 10th grade at entry, read at a 7.6 grade level, and perform at a 7.1 grade level in math.<sup>3</sup> Although the number of years of schooling completed does not seem to vary by center type or region, students' grade levels vary on both these dimensions. For example, the initial TABE reading and math scores of CCC students seem to be higher compared to students served by contract centers. Thus, these results indicate that compared to contract centers, CCCs tend to serve more students without a GED or high school diploma but with higher measured reading and math abilities.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup>Although not reported in the table, there are substantial differences in students' academic abilities by region of the country. Specifically, students in Region 2 have much lower educational attainment, with less than 15 percent of terminees having a GED or high school diploma at entry, compared to Regions 1 and 10, where nearly twice as many students (28 percent) have a GED or high school diploma when they enter Job Corps.

<sup>&</sup>lt;sup>2</sup>These are norm-referenced tests designed to measure achievement in basic skills commonly found in adult basic education curricula and taught in instructional programs. At the time the National Job Corps Study began, Job Corps was using Forms 5 and 6 of the TABE. Beginning in July 1996, Job Corps began using the new edition of the TABE, Forms 7 and 8, which expanded the assessment range to include new objectives that are measured in the GED tests and taught at the high school level and beyond.

<sup>&</sup>lt;sup>3</sup>Because grade-level equivalents are not equal interval scales, it is not strictly appropriate to create an arithmetic average of students' grade levels. As a result, Job Corps has more recently adopted the use of scale scores to measure students' academic abilities. However, we report grade-level equivalent data here for ease of interpretation and because scale scores were not consistently available for this period.

<sup>&</sup>lt;sup>4</sup>Although not reported, we also find that Region 2 students have the lowest reading level (6.9 grade-level equivalent on average), compared to a high of 8.9 in Region 10 and 8.5 in Region 7/8. (continued...)

The next section discusses in more detail the academic programs that Job Corps offers for this population.

#### C. ACADEMIC EDUCATION PROGRAM OFFERINGS

The Job Corps academic education program offers open-entry, open-exit courses in reading, mathematics, writing/thinking skills, GED, and other core areas. Teachers implement the program with the help of the Job Corps Computer Managed Instructional (CMI) system, which provides them with current student data that can be used for placing students at an appropriate level and for follow-up assessment. At the time of the site visits, the academic program at 10 of the 23 centers was accredited by an external entity, either by the regional accrediting association or by the state education agency.

# 1. Reading Competencies Program

Job Corps provides a Basic Reading and a Graded Reading competencies program. According to the policies effective at the time of our site visits in 1996, students are placed into the Basic Reading program if the score on their initial TABE reading test is a grade-level equivalent of 3.2 or lower.<sup>5</sup> Students with TABE reading grade equivalent scores of 3.3 to 8.4 are placed in the Graded Reading program. Students scoring 8.5 or greater on their initial TABE reading test are typically exempted from placement into the reading program, and those without a high school diploma or GED are assigned to the GED program. Students with a high school diploma or GED who score

<sup>&</sup>lt;sup>4</sup>(...continued)
In the two regions with the highest average reading levels, from 53 to 60 percent of students read above the 8.5 grade level, compared to less than 30 percent of the students in Region 2.

<sup>&</sup>lt;sup>5</sup>Although in July 1996 a new form of the TABE (7/8) was introduced that is somewhat more difficult than version 5/6, the regulations in the Job Corps *Policy and Requirements Handbook* continued to use the same TABE cutoff levels for assigning students to reading, math, and GED classes.

below 8.5 at entry are placed in the appropriate reading competencies program for remediation. Based on TABE data for students who terminated from Job Corps in 1996, approximately 10 percent scored below 3.2 at entry, 48 percent scored between 3.3 and 8.4, and 41 percent tested at grade-level 8.5 or higher.

Students initially placed in Basic Reading advance to Graded Reading when they complete the required instructional materials, demonstrate competency on completion tests specified for their level, and attain a grade equivalent of 3.3 or higher on the TABE. Students exit the Graded Reading program when they complete the required readings/skills assignments and attain passing scores on the reading and skill tests or score 8.5 or higher on a follow-up TABE. Even students who enter Job Corps with a GED or high school diploma must score 8.5 or higher on their TABE to be exempt from the reading program.

The CMI system assists teachers and students in this process by providing initial placement, lesson assignment, lesson and test scoring, and individual student tracking. The Job Corps curriculum and the CMI system dictate the contents of the reading program almost entirely. Discussions with academic instructors during the site visits reveal that most reading instructors rely solely upon Job Corps material and few use supplemental materials. Academic instructors at most centers indicated that they have some degree of flexibility with their instructional approach but less with the content, which is dictated by the CMI system. Although all centers we visited provide the reading program according to its two-tier design of Basic Reading and Graded Reading, one center divides the graded reading class into two further groupings: 3.3 to 6.3 reading level and 6.4 to 8.4 reading level.

Several centers provide individualized tutorial assistance to help students with their reading program. At least two of the centers visited use the New Century Reading and Math Program, a

computer tutorial program. Other centers have arranged to receive tutorial assistance for their center from local organizations (such as an adult literacy center), individuals, or community colleges. In addition, as described in more detail below, a special Job Corps tutorial program---Maximizing Academic Potential (MAP)--is offered at more than half the centers visited to assist students who are having difficulty progressing in their reading (or math) program.

Based on our review of the program at 23 centers, CMI is a key part of the instruction and assessment components of the Job Corps reading program. CMI provides both computer-assisted instruction for the academic content and a record-keeping and tracking mechanism on student progress through the required levels. CMI contains assignments for students and exercises based on their level of success on preceding assignments; it also provides them with feedback on the results of their work. CMI is generally well regarded by reading instructors, and some of the advantages they cited include:

- Accurate assessment of student progress
- Immediate feedback to students about their progress
- Substantial reduction in paperwork for instructors
- Greater responsibility for students for their learning process as they track their progress

Despite the generally favorable overall evaluation of the CMI system, reading instructors cited certain problematic aspects of the system, including:

- CMI is viewed as inflexible and as difficult for instructors, since they are unable to eliminate or skip certain parts of the curriculum or correct errors they find in the exercises.
- CMI reading assignments do not cover some of the content areas that students encounter in TABE tests.

- TABE results suggest that CMI's reading program lacks the diagnostic component that the math CMI contains.
- Some students have discovered ways to enter fraudulent scores in CMI records to
  indicate they have completed certain assignments that have not actually been completed.
  Although not a pervasive problem, this security breach was cited by staff at several
  centers.
- Staff have difficulty introducing supplemental materials, as students are reluctant to study topics that are not specified in CMI, viewing them as not required and considering additional learning to be a waste of time if the assignment is not on their computer screen. This was noted by several instructors during the center visits.

Discussions with National Office staff reveal that several modifications have been made to the CMI system since our site visits in 1996 to increase the flexibility and functionality of the system. For example, a diagnostic component was incorporated into the CMI reading program in 1997.

# 2. Math Competencies Program

As in the reading program, initial placement into the math program is based on TABE results. Students who lack a high school diploma or GED and who test at grade 8.5 or higher are assigned to the GED program. All students who score lower than grade 8.5 on the TABE math test must participate in the math program until they reach that level. Based on data for students who terminated from Job Corps during 1996, only slightly over one-quarter (26.4 percent) scored 8.5 or above on their initial TABE math test.

The math program consists of four levels of instruction on the following topics: whole numbers, decimals, fractions, and percents/proportions. Completion of all assignments and tests is recorded and tracked by CMI as students advance through the units performing exercises provided by the CMI system, sometimes supplemented by instructor-generated lessons and problems. CMI for the math program contains a diagnostic component. Completion of required assignments, passing scores on unit tests, and an 8.5 or better TABE grade equivalent are exit requirements.

Many of the observations regarding the use, benefits, and disadvantages of the CMI reading program also apply to the math program. In addition, instructors specifically noted several other disadvantages of the math CMI:

- Math CMI lends itself more to test-taking and is less useful in providing instructional exercises and feedback.
- Math CMI contains too many assignments and exercises that have to be completed for a student to demonstrate mastery and move to the next level; instructors need to reduce the assignments for students to avoid impeding student progress.
- Instructors need a way to modify the word problems in the test; otherwise students learn
  the test questions and score higher on the tests than their true abilities would otherwise
  indicate.
- Teacher-generated skills sheets have to be used to cover some items that are on the TABE test but not covered in the CMI assignments for the appropriate TABE test level.
   For example, teachers reported that the point at which fractions and decimals are covered in the CMI does not correspond with the expected level of knowledge reflected on the TABE test, and they must supplement the curriculum in these areas.

# 3. Writing/Thinking Skills Competencies Program

Students are placed into the writing/thinking skills program based upon a pre-assessment test and a writing sample (essay) given upon entry. Results of these tests are analyzed by the CMI system, and students are assigned to the appropriate units in each of four skill area components: (1) usage/mechanics, (2) process, (3) application, and (4) thinking skills. A student is considered to have completed the program upon attainment of a specified minimum score on post-tests or completion of all assigned additional required and supplementary materials. A completer may be promoted to the GED program in the subtest area of writing skills or to the Graded Reading classes, if additional work is needed in those areas. As with the reading and math assessments, students have to achieve PRH-specified minimum threshold scores to be exempted from this component of the educational program, even if they have already received a GED or high school diploma.

During the site visits, we obtained considerable input from teachers concerning the writing/thinking skills curriculum. Specifically, in five of the centers visited, staff indicated that this curriculum needed to be overhauled. Their comments indicated that it often "does not engage the students" and that it "is over the head" of many who meet the entry requirements. This course was cited at one center as having "an exceptionally high student failure rate." More computer-assisted instruction was suggested as a way to make the course more beneficial, since it allows better interactive diagnostics of student weaknesses and tailored assignments and feedback.

# 4. GED Competencies Program

All centers offer a GED Competencies Program to prepare students without a GED or high school diploma for the five subject area subtests of the GED: writing skills, social studies, science, interpreting literature and the arts, and mathematics. Students are required to complete the graded reading, math, and writing/thinking skills competencies programs--or test out of them based on their initial TABE scores--before being enrolled in the GED program. Some centers offer a pre-GED class for students who complete reading and math but who are still unable to score high enough on the TABE test to indicate readiness for the GED program.

As described in Chapter IX, the percentage of students earning GEDs is an important performance measure for Job Corps centers. Most centers focus great attention on preparing students to enroll in the GED program and to take the GED test. Several centers use additional materials, beyond standard Job Corps curriculum, as part of their curriculum. Software programs (GED 2000), Compuserve on-line GED materials, tutorials using college students from area schools or local adult education centers, and creative writing instructors were mentioned by some of the centers visited as important aspects of the GED program. Although most centers structure classes so that a single instructor teaches all GED subjects, at least one center found the use of different instructors for

different components (such as reading, math, and social studies) to be especially effective. One academic manager indicated that the Job Corps GED curriculum is superior--more comprehensive and in-depth--than that of most outside GED programs.

In addition to helping students obtain their GEDs, approximately one-third of the centers offer students the opportunity to obtain high school diplomas. Although several Job Corps centers are designated as alternative high schools, high school diplomas are usually offered in conjunction with the local public school system, either through on-center courses or classes at the local high school. Although education program staff try to encourage students to obtain their diploma by describing the additional value of a high school diploma over a GED, they reported that it is often difficult to persuade students to commit the additional time and effort.

### 5. Other Core Academic Program Offerings

All Job Corps centers also offer other required components of the Job Corps academic program: WOW, health education/alcohol and other drugs of abuse, parenting education, cultural awareness and IGR, and driver education. Although ESL is not required, we cover it in this section because it is part of the academic program at a number of centers. Key elements of these components are discussed below.

World of Work (WOW). Although WOW is required of all students, PRH regulations specify that students are not to be assigned to this course until their TABE reading score is adequate for them to be assigned to Graded Reading. The WOW course has two major components: (1) an introductory phase (consisting of general skills for getting and keeping a job), and (2) the exit readiness phase (preparing students to conduct their job search). The introductory phase is intended to be taught at or near a student's entry into Job Corps, and the exit readiness phase is intended as a refresher in employment-seeking skills before a student leaves the center to work. To complete the WOW

program, students must take pre- and post-tests, complete application tasks for each unit of instruction within the introductory phase, and demonstrate mastery within each unit. The CMI system is used in the introductory phase of WOW for placement, assignments, test scoring, and individual student tracking.

The exit readiness phase consists of three units: (1) resume, cover letter, and application preparation; (2) job sources and interviews; and (3) transition issues. Some centers consider this a separate course that they call "Exit World of Work." A post-test is used only to measure competency in the "transition issues" unit of the course. The other exit readiness phase units are designed so that students complete assignments and prepare a product, a portfolio of materials to take with them to use in their personal job search.

Most centers teach WOW as a self-paced course. However, at least one of the centers visited taught the introductory phase as a "lock-step" course. Staff at several centers suggested ways that WOW could be improved and made more useful to students. Among their concerns was that the assessment tests had not been modified to reflect recent changes in the course materials. Staff at several Job Corps centers we visited also indicated that WOW needs to be more practical and up to date and should include topics such as teamwork and sexual harassment, as well as simulated videotaped job interviews. The academic manager at one center also recommended that the introductory WOW occur later in the student's tenure, when the course materials are more relevant to students.

Health Education/AODA Program. The health education program (HEP) contains a basic component and a 10-hour AODA (alcohol and other drugs of abuse) unit, which many centers treat as a separate course. The PRH indicates that the AODA unit should be taught using a lock-step group presentation instructional approach. An AODA counselor or specialist often teaches that portion of

the course. From our site visits, we found that many centers taught AODA early in the student's academic schedule, usually in a lock-step approach. Topics covered in the AODA classes reportedly include Job Corps' zero-tolerance (ZT) policy, anger control, building self-esteem, and other topics to teach students about decision-making. Only one center indicated that AODA was taught with a self-paced, open-entry, open-exit approach, with student activity guides (SAGs) as completion guides. Several center staff indicated that the AODA curriculum needed updating.

The remaining part of HEP is usually taught by a different instructor, often a nurse or one of the instructors from a health-related training program. This portion of the HEP curriculum is typically presented with a self-paced, open-entry, open-exit approach. Topics covered in addition to AODA include emotional and social well-being, human sexuality, sexually transmitted diseases (STDs), HIV/AIDS, nutrition, fitness, dental hygiene, consumer health, and safety. First aid and CPR training are also recommended for students. Staff from two of the centers visited indicated that HEP needed to be "livened up" to make it more interesting and effective.

**Parenting.** The parenting course is required for all students--males, females, parents, and nonparents. Students must demonstrate mastery of 28 essential skills to verify their competency before being designated as having successfully completed the course. The Job Corps PRH recommends that students either be simultaneously enrolled or have completed the health education units on STDs and human sexuality before enrolling in the parenting education component.

Many of the centers we visited offer parenting as a lock-step course. One staff member suggested that it would be useful to combine parenting into a course that could also include health and perhaps cultural awareness. Other staff suggested making parenting self-paced to provide more flexibility in scheduling, so that students are not getting near their termination date and then trying to schedule entry into a class that they were unable to schedule previously.

Cultural Awareness. The cultural awareness class is one portion of the structured IGR program (described in Chapter VI) that each center must offer. The course component consists of eight instructional units that are scheduled into each student's academic program. Topics include living among different cultural groups, acceptance of differences, and discussions about different languages, music, food, and art. Videos and exercises are often part of the course. Course completion is based on the satisfactory demonstration of the student's achievement of the objectives as measured in a written or oral assessment by the instructor.

During our site visits, we observed that these courses are taught by a variety of different types of staff, depending on who expressed an interest, had time available, and was willing to take the assignment. Many centers teach the course in a lock-step manner. One center combines cultural awareness and parenting during the student's third week on center, before the student is assigned to the rest of the vocational or academic program.

**Driver Education.** The PRH indicates that driver education should be offered to all eligible students, with priority given to students in vocations where the possession of a driver's license is essential. Driver education is designed to meet the requirements for classroom and on-the-road training of the state in which the center is located. Centers pay the cost of licenses for eligible students.

The extent to which centers provide an active driver education program varies considerably. For example, several centers indicated that they currently had no students enrolled in driver education. This was generally due to the lack of an instructor or an available vehicle. One center indicated that it provided driver education through a contract with the American Automobile Association in its area.

English as a Second Language (ESL). The ESL Competencies Program is designed to be taught at all centers designated as ESL centers. Students who are unable to read the TABE locator because English is not their primary language are exempted from taking the TABE reading subtests and are assigned a TABE total reading score of 1.0 (the ESL designation). ESL students and those who have limited English proficiency (LEP) are scheduled to take the Comprehensive Adult Student Assessment System (CASAS) test. All students who fail to attain a designated reading or listening scale score on the CASAS test must enroll in the ESL program. (Enrollment in ESL is optional for LEP students.) ESL instructors determine when students complete the ESL program, based on the students' mastery of assignments and tests at their designated level. Close to half the sites we visited included ESL instruction as part of their academic program, and one center had an ESL math program.

### 6. Special Academic Programs

In 15 of the 23 centers visited, various special programs and pilot projects were implemented as part of the academic education program to help improve student performance. The most common was MAP, an intensive instructional approach aimed at students who are not performing at the expected pace in reading or math. More than half the centers visited offer the MAP program to students who need individualized remedial assistance, especially in reading. In most centers in which MAP is available, students are assigned and scheduled to the program based on either their initial TABE scores or their progress in initially assigned classes; in one center, students are given the option of signing up for a MAP class.

Some of the centers visited offer other remedial tutorial programs, including Success Maker (an interactive computer-assisted reading and math supplemental program), an SOS (Strategies for the Older Student) reading laboratory, off-site Adult Basic Education classes, and other special tutorial

classes or assistance. According to the center mail survey, 90 percent of centers report that they offer tutoring programs for academic classes (94 percent of contract centers and 80 percent of CCCs).

In addition to providing remedial and tutorial assistance programs, some centers offer "enrichment" courses beyond the basic Job Corps curriculum. Courses such as journalism, graphing, computer lab instruction, physical education, advanced reading, advanced math, and even advanced driver education are available at selected centers to students who meet the eligibility criteria, typically completion of the basic offerings or attainment of a GED. In addition, 43 percent of all centers reported in the mail survey that they offer a pre-college/technical institute course for students who want to enroll in postsecondary classes. This course provides students with additional support on study habits, reading and math skills enhancement, and other preparation to help their transition into advanced education and training. Also, at least five of the centers visited offer college and postsecondary opportunities; in three cases, some college courses are taught on center.

We also obtained information on the extent to which centers offer optional academic programs. According to the mail survey, 61 percent of centers offer off-center college courses; 14 percent offer college courses on center; 42 percent offer ESL classes; and 43 percent offer pre-college and technical skills training. The optional offerings available at CCCs are considerably different from those of contract centers. For example, 76 percent of contract centers and only 20 percent of CCCs offer off-center college technical institute classes. Similarly, 50 percent of contract centers offer ESL classes, compared to only 20 percent of CCCs.

# D. ASSESSMENT, ASSIGNMENT, AND SCHEDULING

Student assignments to classes and the mix of their academic and vocational course load are based primarily on the results of initial and follow-up assessments. Assignment to the appropriate level of reading, math, or GED classes is based solely on results on the student's initial TABE. All

centers administer the TABE to students, along with the Writing/Thinking Skills Pre-Assessment Tests, as part of their first week's activities. TABE testing typically includes a TABE locator test, which determines which test level is appropriate. Proper levels of the reading and math TABE subtests are then administered. The results of the TABE and the Writing/Thinking Skills Pre-Assessment Test are usually obtained a week to 10 days after a student's arrival on center. According to center staff, these assessment activities take about five to six hours on average.

These required tests are the only ones used at most centers, though some also use the Comprehensive Adult Student Assessment System (CASAS) for ESL students. Some administer a practice version of the GED test to students who perform sufficiently well on the TABE assessments.<sup>6</sup>

The scheduling of a student's initial academic and vocational coursework may be conducted by a scheduling clerk, the academic manager or lead instructor, or a committee that consists of academic, vocational, and other staff. At one center we visited, students participated in a scheduling meeting with the academic manager, vocational manager, OEP instructor, and counselor to discuss their vocational choice and schedule of classes. Once the vocational choice is made, the academic schedule is structured to ensure that all TABE-indicated classes are provided. In addition to the reading and math academic classes, the student must be scheduled for other required core courses.

At most centers, students begin their academic program during either their third or their fourth week on center, after completing orientation, academic assessment, and OEP. Because some trades may have waiting lists, the vocational schedule is established first, and the academic schedule is then

<sup>&</sup>lt;sup>6</sup>In addition, some provisions are made on a limited basis at selected centers for students who may have special needs--learning disabled, special education, or physically unable to take the TABE. However, most centers indicate that they have not had to make provisions for students with special needs because they do not enroll them--students with substantial disabilities are usually assigned to the few centers especially equipped to accommodate them.

fit around the nonvocational periods. Several noteworthy deviations from this typical process were observed:

- At several centers, students begin their academic program during their second week on center, immediately after completing their TABE testing. In those instances, the students are going through their vocational assessment (Occupational Exploration Program) while in the early days of their academic program.
- In other centers, students are assigned to take required courses such as cultural awareness or parenting during their third week on center, before beginning their core academic program. In those cases, students might not begin reading and math classes until their fifth week on center, especially if they begin a full week of vocational classes during their fourth week.
- At one center we visited, students must complete a week of center support (usually
  manual labor to help maintain the center) before they begin their academic or vocational
  program. Students in this center do not begin their academic program until their fourth
  or fifth week. Staff at this center believe that this activity helps students recognize that
  they have a shared responsibility to contribute to the maintenance and upkeep of the
  facilities.

Most students begin their Job Corps program with a balanced schedule of one-half academic coursework and one-half vocational coursework. Even students who have completed their basic reading and math requirements or have a GED or high school diploma are initially assigned to the other courses (health education, WOW, cultural awareness) to complete their academic requirements. Once those requirements are fulfilled, students are able to move quickly toward a full-time vocational schedule. Conversely, students with substantial academic needs may be assigned to an 80 percent academic (and 20 percent vocational) schedule during their early period on center, so that they make necessary progress toward the learning goals. At the extreme, ESL students, before being assigned to a trade, may take a 100 percent academic schedule until their skills in English are sufficient to establish an initial TABE level and they demonstrate understanding of English instructions.

Several academic staff reported that they prefer a split-day schedule, especially for students with low academic skills, because their students lose too much focus when they are away from academics for a whole week. Conversely, the intensity of a full day of academics can also be overwhelming for low-skilled students. The split day, which gives a dose of academic activities to students every day, is seen as best for many of the Job Corps students, although it makes vocational instruction, especially on work sites, more difficult.

#### E. FACILITIES AND RESOURCES

Resources available to support the academic programs of Job Corps include the academic education classrooms and may include libraries, learning labs, and tutors or aides. Almost every center visited had a library, and most centers also have learning labs, academic counseling, and tutors/aides available as resources for students.

Job Corps center staff are generally pleased with the facilities and materials available for the academic portion of the program. Staff rated academic facilities as average or above average on most factors, including space, light, temperature, noise control, accessibility and safety, and cleanliness and maintenance. Where complaints were voiced, they typically focused on the cramped classroom space available for the academic program at some centers.

The availability and condition of materials for the academic program were typically rated as above average by staff during our site visits. Learning materials, including books, equipment, and other supplies, were accessible, in good physical condition, and in sufficient quantity for all students. Very few complaints were voiced about the materials, except that some were considered inappropriate for the students' age and cultural background. Several instructors cited a need for

greater cultural relevance of materials used in some classwork. Overall, however, center facilities and resources do not appear to limit the academic program.

#### F. COORDINATION WITH VOCATIONAL EDUCATION

A variety of federal, state, and local education initiatives are aimed at increasing the communication and collaboration between academic and vocational education instruction and staff. Approaches such as school-to-work and Tech-Prep have resulted in greater recognition of the importance of reinforcing the link between academic content and its application in the workplace. Similar efforts have been made in Job Corps as well, including a growing school-to-work emphasis that was evident at a few centers and that has expanded considerably in many more. Next, we briefly summarize examples of vocational and academic educational collaboration:

- Eleven of the 23 academic managers we interviewed during the center visits reported that their vocational and academic areas coordinated programs "to a great extent," while 9 indicated that academic and vocational staff coordinated "to some extent." Coordination typically included meeting to discuss scheduling, individual student progress, and academic deficiencies to be addressed in the vocational trades.
- Over 80 percent of the academic respondents indicated that vocational and academic faculty met regularly to discuss individual student progress. This is most likely to occur during group P/PEP sessions in which academic and vocational staff met, along with other staff, to discuss student progress.
- Vocational and academic staff coordination also occurred during the scheduling of course offerings. Academic and vocational staff met to discuss the proposed schedule for individual students. In a few centers, academic assessment results entered into the vocational decision for selected trades.
- Academic and vocational staff were less likely to coordinate curriculum or to discuss modifications in the academic or vocational program.
- At the time of the site visits, two centers had aggressively implemented an applied academics component to facilitate school-to-work transitions. At one of these, the vocational and academic instructors met weekly to develop an "applied academics" lesson that would be taught each week in each of the trade classes. At the other, applied

academics were stressed through teachers switching between academic and vocational classes.

Despite frequent meetings between academic and vocational staff to discuss individual student progress and scheduling, several barriers to further collaboration were reported. In some cases, historical patterns of separation between academic and vocational instruction continued, and reluctance to change was substantial. In many cases, academic and vocational education remain under two separate managers who have parallel but separate reporting chains to the center director. As a result, these two components continue to be seen as distinct entities. Other observations include:

- Academic staff in several centers expressed frustration with what they believed to be trade instructors' lack of commitment to improving the academic capabilities of students. One respondent indicated that a trade instructor said, "I don't care if they ever get a GED, as long as they learn the trade."
- Because of the lack of time (a result of limited planning periods and different end-of-day times for academic and vocational staff), some managers believed that, without some systemic changes, the potential for further coordination between academic and vocational areas was limited.
- "Territorial staff," who are focused on either their academic or their vocational area, were also cited as a barrier to further collaboration.

Nevertheless, the amount and quality of collaboration between academic and vocational education components at Job Corps centers appear to be substantially more than is often found in many traditional school settings.